

REMARKS/ARGUMENTS

Claims 1-3, 5-9, 13, 14, 17, 19, and 20 are pending in the present application, of which claims 1, 6, 13, and 17 are independent. Claims 6 and 13 are amended. No new matter is added.

The courtesies extended to Applicant's representative by Examiner Candal Elpenord during the telephonic interview held on November 30, 2009 are appreciated. The reasons presented at the interview as warranting favorable action appear in the remarks below and constitute Applicant's record of the interview

Entry of the amendments is proper under 37 CFR 1.116 because the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issues requiring further search and/or consideration (because the amendments amplify issues previously discussed throughout the prosecution); (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and/or (e) place the application in better form for appeal, should an appeal be necessary.

REJECTIONS UNDER 35 U.S.C. § 112, ¶2

On pages 2 and 3, the Office Action rejects claims 6-9, 13, and 14 under 35 U.S.C. § 112, second paragraph as allegedly indefinite. Applicant respectfully traverses these rejections.

As discussed during the telephonic interview on November 30, 2009, the proposed amendment to independent claims 6 and 13 does not raise any new issues requiring further search and/or consideration because it merely modifies the language for consistency with “the first PE or the second PE” found elsewhere in claims 6 and 13. Accordingly, Applicant respectfully requests withdrawal of the rejections of claims 6-9, 13, and 14 under 35 U.S.C. § 112, second paragraph.

REJECTIONS UNDER 35 U.S.C. § 103(a)

On pages 3-11, the Office Action rejects claims 1-3 under 35 U.S.C. § 103(a) as allegedly unpatentable over Pub No. US2003/0110268 to Kermarec et al. (hereinafter “Kermarec”) in view of U.S. Patent No. 7,113,512 to Holmgren et al. (hereinafter “Holmgren”), further in view of U.S. Patent No. 6,041,057 to Stone et al. (hereinafter “Stone”), yet further in view of U.S. Patent No. 6,967,954 to Sugiyama et al (hereinafter “Sugiyama”), and still further in view of U.S. Patent No. 7,292,577 to Ginipalli et al. (hereinafter “Ginipalli”). On pages 11-13, the Office Action rejects claim 5 under 35 U.S.C. § 103(a) as allegedly unpatentable over

Kermarec in view of Holmgren, further in view of Stone, further in view of Sugiyama, further in view of Ginipalli, and further in view of Pub. No. US2002/00231 to Frelechoux et al. (hereinafter "Frelechoux"). On pages 13-20, the Office Action rejects claims 6 and 7 under 35 U.S.C. § 103(a) as allegedly unpatentable over Kermarec, further in view of Stone, further in view of Frelechoux, further in view of Sugiyama, and further in view of Ginipalli. On pages 20 and 21, the Office Action rejects claims 8 and 9 under 35 U.S.C. § 103(a) as allegedly unpatentable over Kermarec, further in view of Stone, further in view of Frelechoux, further in view of Sugiyama, further in view of Ginipalli, and further in view of U.S. Patent No. 6,456,600 to Rochberger (hereinafter "Rochberger"). On pages 22-30, the Office Action rejects claims 13 and 14 under 35 U.S.C. § 103(a) as allegedly unpatentable over Kermarec in view of Holmgren, further in view of Stone, further in view of Sugiyama, and further in view of Ginipalli. On pages 30-38, the Office Action rejects claims 17, 19, and 20 under 35 U.S.C. § 103(a) as allegedly unpatentable over Holmgren, further in view of Stone, further in view of Kermarec, further in view of Frelechoux, and further in view of Sugiyama. Applicant respectfully traverses all of these rejections.

Independent claim 1 recites, in part, the following subject matter: "generating a PNNI Topology State Element (PTSE) including a VPLS Information Group (IG), the VPLS IG indicating the VPLS ID and an ATM address"

(emphasis added). Independent claims 6, 13, and 17 contain similar recitations. Applicant respectfully submits that the references of record, alone or in combination, fail to disclose, suggest, or teach this subject matter.

On page 4, the Office Action alleges that Kermarec discloses a method of emulating VPLS. While Kermarec may provide a virtual private network (VPN), Applicant respectfully submits that Kermarec does not provide a VPLS IG. Moreover, Kermarec does not indicate both the VPLS ID and the ATM address.

First, Applicant respectfully submits that Kermarec's VLAN ID, cited by the Examiner on page 4, is not equivalent to a VPLS ID because it is applicable to Virtual Local Area Networks (VLANs) instead of Virtual Private Local Area Network Services (VPLSs) that are emulated within an ATM network. Moreover, Kermarec does not use the VLAN ID within an ATM network as a VPLS ID and certainly does not use a VPLS IG to indicate a VPLS ID as claimed above.

Second, Applicant respectfully submits the references of record do not use a VPLS IG to indicate an ATM address. On page 5, the Office Action correctly concedes that Kermarec is silent regarding an ATM address. To remedy this admitted deficiency, the Office Action applies the teachings of Holmgren. However, Applicant respectfully submits that Holmgren's ATM address is associated with a VLAN, as set forth on page 6 of the Office Action. Thus, Holmgren, like Kermarec, uses a VLAN instead of a VPLS and fails to remedy Kermarec's deficiencies.

On page 7, the Office Action correctly concedes that Holmgren and Kermarec are both silent regarding “the VPLS IG indicating the VPLS ID and an ATM address.” The Office Action then applies the teachings of Stone. Again, Applicant respectfully submits that Stone discloses an ATM address in the context of VLAN, not VPLS. Thus, Stone also does not remedy the admitted deficiencies.

Independent claim 1, further recites, in part, the following subject matter: “establishing a mesh of virtual circuits to emulate VPLS by attaching virtual circuits to pairs of PEs, each of the pairs of PEs in the mesh comprising a first PE and a second PE” (emphasis added). Independent claims 6, 13, and 17 contain similar recitations. Applicant respectfully submits that the references of record, alone or in combination, fail to disclose, suggest, or teach this subject matter.

On page 4, the Office Action alleges that Kermarec establishes virtual circuits between PEs, citing paragraphs [0019] and [0025] of Kermarec. While paragraph [0019] of Kermarec does disclose “a virtual circuit between said first and second PE devices,” Kermarec does not disclose a mesh of virtual circuits. Moreover, paragraph [0025] of Kermarec describes establishment of per VLAN-ID virtual circuits between PE devices. Applicant respectfully submits that such establishment differs from the claimed mesh and would not permit full emulation.

As further disclosed in paragraph [0004], service providers cannot currently emulate VPLS over existing ATM networks due to the inability to automatically

establish a mesh of connections between PEs to provide both local and remote bridging for the VPLS. The conventional solution involved addition of an MPLS signaling protocol, a solution that was both costly and operationally challenging. In contrast, the recited subject matter describes how pairs of PEs are automatically grouped into a mesh, thereby providing full VPLS-like services on the network.

Chase, Frelechoux, Ginipalli, Holmgren, Kermarec, Nair, Rochberger, Stone, Sugiyama fail to disclose, suggest, or teach this subject matter. The references of record do not use a mesh of virtual circuits in the claimed manner for VPLS emulation. Accordingly, Applicant respectfully asserts that independent claims 1, 6, 13, and 17 are allowable.

Claims 2, 3, and 5 depend from allowable claim 1, claims 7-9 depend from allowable claim 6, claim 14 depends from allowable claim 13, and claims 19 and 20 depend from allowable claim 17. Thus, Applicant respectfully submits that claims 2, 3, 5, 7-9, 14, 19, and 20 are allowable at least by virtue of their respective dependencies upon allowable independent claims. Accordingly, Applicant respectfully requests that the rejections of claims 1-3, 5-9, 13, 14, 17, 19, and 20 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

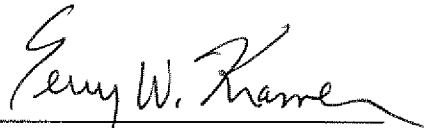
In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

While we believe that the instant amendment places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner telephone the undersigned attorney in order to expeditiously resolve any outstanding issues.

In the event that the fees submitted prove to be insufficient in connection with the filing of this paper, please charge our Deposit Account Number 50-0578 and please credit any excess fees to such Deposit Account.

Respectfully submitted,
KRAMER & AMADO, P.C.

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